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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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Raymond Scott Tetrick

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EXAMINER

KAWSAR, ABDULLAH AL

ART UNIT

PAPER NUMBER

2195

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/813,794	<b>Applicant(s)</b> TETRICK, RAYMOND SCOTT	
	<b>Examiner</b> ABDULLAH AL KAWSAR	<b>Art Unit</b> 2195	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 19 May 2008.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-26 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-26 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 31 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

**DETAILED ACTION**

1. Claims 1-26 are rejected.

***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-5, 7-18, 20-22 and 24-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fox et al.(Fox) US Patent No. 7251746 , in view of Gerber et al.(Gerber) US Patent No. 6163793.

4. As per claim 1, Fox teaches the invention substantially as claimed including a method of reserving an execution thread comprising:

describing a selected processing unit as a spare processor in a device description (col 5, lines 58-61);

preventing peripheral devices from using the selected processing unit (col 5, lines 50-56)

providing a processor description including one or more available processing units to an operating system, wherein the selected processing unit is omitted from the processor description (col 5, lines 58-63; col 6, lines 2-4; lines 29-34).

Fox does not specifically disclose describing a selected processing unit as a peripheral device.

However, Gerber teaches describing a selected processing unit as a peripheral device (col 11, lines 40-52).

5. It would have been obvious to a person of ordinary skill in art at the time of invention was made to incorporate the teaching of Gerber into the method of Fox to describe a processing unit as a peripheral device. The modification would have been obvious because one of the ordinary skills of the art would be able to change the processor description or read a processor as a peripheral device using the driver description of the method of Gerber.

6. As per claim 2, Fox teaches reading the device description of the selected processing unit (col 5, lines 58-61);

Fox does not specifically disclose recognizing the device description of the processing unit as a device description of a peripheral device; retrieving a device driver for the processing unit based on the device description of the selected processing unit; and allocating resources to the selected processing unit based on a request from the driver.

However Gerber teaches recognizing the device description of the processing unit as a device description of a peripheral device (col 11, lines 36-44 );

retrieving a device driver for the processing unit based on the device description of the selected processing unit (col 11, lines 36-42); and

allocating resources to the selected processing unit based on a request from the driver (col 3, lines 41-49).

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7. As per claim 3, Gerber teaches communicating with the processing unit as a peripheral device via the driver (col 1, lines 52-58; col 11, lines ).

8. As per claim 4, Fox teaches the device description comprises an identification unique to the selected processing unit (col 5, lines 58-62).

9. As per claim 5, Fox teaches the device description comprises at least one of the following: vendor identification, device identification, allocated address space, interrupt capabilities, basic input/output system code address and power saving capabilities (col 5, lines 58-62).

10. As per claim 7, Fox teaches describing the selected processing unit comprises creating the device description and setting device configuration values for the selected processing unit (col 3, lines 34-38).

11. As per claim 8, Fox teaches describing the selected processing unit comprises describing the selected processing unit as a spare processor in a device configuration description within a bus configuration space (col4, lines 46-53; col 5, lines 50-56).

Fox does not specifically disclose describing a selected processing unit as a peripheral device.

However, Gerber teaches describing a selected processing unit as a peripheral device (col 11, lines 40-52).

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12. As per claim 9, Fox teaches preventing peripheral devices from using the selected processing unit comprises modifying an interrupt controller to prevent the selected processing unit from receiving interrupt requests (col 5, lines 50-56).

13. As per claim 10, Fox teaches providing the processor description of one or more available processing units to an operating system comprises providing a power management table to the operating system, wherein the power management table includes a description of all available processing units except the selected processing unit (col 6, lines 29-34; col 5, lines 63-67).

14. As per claim 11, Fox enabling a processor to allow the device description to be written and notifying the selected processing unit of the device description (col 6, lines 28-34; lines 38-41).

15. As per claim 12, Gerber teaches accessing the selected processing unit from a front side bus and from a processor (figure 1; col 2, lines 40-43; lines 51-65).

16. As per claim 13, Fox teaches executing at least one of the following using the selected processing unit: a system health monitor, an operating system kernel external to the operating system, a device, a system performance enhancement, a network stack partition, and server management (col 3, lines 1-11).

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17. As per claim 14, Fox teaches the processing unit comprises a logical processing unit related to one or more execution threads (col 4, lines 48-53).

18. As per claim 15, Fox teaches the processing unit comprises a processing core related to one or more execution threads (col 4, lines 56-57; col 3, lines 26-31).

19. As per claim 16, Fox teaches a basic input/output system program performing the method of claim 1(col 6, lines 153-55).

20. As per claim 17, Fox teaches the invention substantially as claimed including a method of reserving an execution thread comprising:

reading a device description relating to a processing unit, the device description comprising an identification relating to the processing unit(col 5, lines 58-63; col 6, lines 37-39);

Fox does not specifically disclose However Gerber teaches searching for device descriptions of peripheral devices; recognizing the device description of the processing unit as a device description of a peripheral device; retrieving a driver for the processing unit based on the identification; and allocating resources to the processing unit based on a request from the driver.

However Gerber teaches searching for device descriptions of peripheral devices (col 3, lines 34-43);

recognizing the device description of the processing unit as a device description of a peripheral device (col 11, lines 36-44);

retrieving a driver for the processing unit based on the identification(col 11, lines 36-42);  
and  
allocating resources to the processing unit based on a request from the driver (col 3, lines 41-49).

21. As per claim 18, it has similar limitations as of claim 3 above. Therefore it is rejected under the same rational as of claim 3 above.

22. As per claim 20, Fox teaches reading a description of a processor including one or more available processing units, wherein the processing unit is omitted from the processor description (col 5, lines 58-63; col 6, lines 2-4; lines 29-34).

23. As per claim 21, Fox teaches an operating system performing the method of claim 17 (col 6, lines 57-67).

24. As per claims 22, 24-26, they have similar limitations as of claims 1, 7, 9 and 10 above. Therefore, they are rejected under the same rational as of claims 1, 7, 9 and 10 above.

25. Claims 6, 19 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fox et al.(Fox) US Patent No. 7251746, in view of Gerber et al.(Gerber) US Patent No. 6163793, as applied to claim 1, 17 and 22 above, and further in view of Bodin et al.(Bodin) US Patent No. 6760784.



26. As per claim 6, Gerber teaches describing the selected processing unit comprises describing the selected processing unit as a peripheral device (col 11, lines 40-52).

Fox and Gerber do not specifically disclose describing the peripheral device in a bus configuration header.

However Bodin teaches describing the peripheral device in a bus configuration header (col 9, lines 43-49).

27. It would have been obvious to a person of ordinary skill in art at the time of invention was made to incorporate the teaching of Bodin into the combined method of Fox and Gerber to have the device description the bus configuration header. The modification would have been obvious because one of the ordinary skills of the art would modify the device description in virtual device configuration into the bus configuration header to be able to identify the virtual device driver.

28. As per claim 19, it has similar limitations as of claim 6 above. Therefore, it is rejected under the same rational as of claim 6 above.

29. As per claim 23, it has similar limitations as of claim 6 above. Therefore, it is rejected under the same rational as of claim 6 above.

### ***Response to Arguments***

30. Applicant's arguments with respect to claim rejection 1-26 have been considered but are moot in view of new ground(s) of rejection.

31. In remarks applicant argues that:

(1) Objection of claims 22-26 are improper.

32. Examiner respectfully disagrees with applicant:

i. as to point (1), applicant argues that: “readable medium is described in the specification, even though the exact terminology is not used”. Applicant further argues that: “readable medium finds clear support in both the written description and in the claims as originally filed, such that the meaning of this term is readily ascertainable by one of ordinary skill in the art by reference to the description”. This argument is persuasive to the extent that the specification is not required to provide the exact terminology used in claim language. Therefore, the objection has been withdrawn. However, applicant is notified herein that the term “computer readable **memory**” used in the claim language has a clear support in the specification by disclosing a read only **memory** (ROM) and random access **memory** (RAM), and flash **memory** devices. Therefore, the Examiner interprets the term “computer readable memory” in light of the specification to include only ROM, RAM, and flash memory. If applicant believes that other machine accessible medium exemplifications described in the specification qualify as “computer readable memory”, Applicant is requested to either amend the specification to group recited machine accessible medium examples under “computer readable memory” category or amend the claim to be commensurate in scope with the specification pertaining to what is included and what is excluded from being “computer readable memory”.

*Conclusion*

33. Any inquiry concerning this communication or earlier communications from the examiner should be directed to ABDULLAH AL KAWSAR whose telephone number is (571)270-3169. The examiner can normally be reached on 7:30am to 5:00pm, EST.

34. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Meng Ai T. An can be reached on 571-272-3756. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

35. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Abdullah-Al Kawsar/  
Examiner, Art Unit 2195

/Li B. Zhen/  
Primary Examiner, Art Unit 2194